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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,569	11/16/2001	Warren Cope	1591	7850

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EXAMINER

O'STEEN, DAVID R

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 07/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/998,569	COPE, WARREN	
	Examiner	Art Unit	
	David R. O'Steen	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7-20,22-35 and 37-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-20,22-35 and 37-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11-16-2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Note to Applicant

1. Art Units 2611, 2614 and 2617 have changed to 2623. Please make all future correspondence indicate the new designation 2623.

Response to Arguments

2. Applicant's arguments filed April 26, 2006 have been fully considered but they are not persuasive.

On page 1, paragraph 3 of the "Remarks" section, applicant states that Gross uses a buffer to store only a small amount of video data. As the applicant further explains that Gross uses a buffer to protect against "variations in video arrival" and to allow the video to be smoothly displayed. This technique prevents the video output device from being "starved" for packets and, therefore, does not require the system to store a significant amount of video.

On page 1, paragraph 4 of the "Remarks" section, the applicant states that Schuster also discloses a buffer measured in milliseconds and, furthermore, is based on packet loss as opposed to the technique claimed by the applicant.

Finally, the applicant summarizes his argument on the fifth paragraph of page 1 of the "Remarks" section by stating that nowhere does Gross or Schuster disclose or suggest using these time periods (video display rate times a first amount of video in the

memory and a network transfer rate times a second amount of the video to be subsequently received in the network signal).

The examiner must respectfully disagree with the applicant. As regards the first point of the applicant, Gross does admit that a buffer can hold more than a small amount of data. In fact, Gross discloses on page 65, lines 13-15 that the user is able to size the buffer. The default size setting of the buffer is the entire clip, which of course means that the buffer may store a few minutes or a few hours of video data. This also suggests that Gross uses a buffer to do more than just "smooth out" the video but to allow "a better quality video experience on slower connections."

As regards the issues raised by the applicant when discussing the buffer and sizing method employed in Schuster, the examiner must again disagree. The examiner has already discussed how buffers can hold video content much larger than a few milliseconds. The examiner does wish to point out while Schuster does disclose a buffer of a few milliseconds in column 10, lines 45-46, he is not opposed to using larger buffers. As to the second point made by the applicant, the passages cited (column 11, lines 39-64) only state that the Schuster's method may also employ a variable which represents packet loss when sizing a buffer. This extra variable is not used to the exclusion of others such as AveDelay and Rate to decide buffer length (col. 12, lines 14-51).

Finally, the examiner wishes to restate that the Gross when combined with Shuster does indeed disclose the buffer sizing technique claimed by the applicant. Gross keeps track of video display rate, network transfer rate, a first amount of video

stored in the memory, a second amount of video to be subsequently received in the network signal, and a network transfer rate that is slower than the video display rate (pg. 2, paragraph 2, of Non-final rejection). Furthermore, Gross notes that RealPlayer allows the user to watch high quality video over a slower connection. It does this by using the buffer to hold the first amount video (RealPlayer is able to tell what the quality of video is from the connection see page 51, lines 7-10), as well as being able to determine the second amount of video not yet received (again, see page 51, lines 7-10 and status bar, page 15, fig. 3.11). The larger the discrepancy between connection speed and the quality of the video, the larger the buffer will be and the longer the user will have to wait for the video to start. Of course, this is better than the "dumb" method of simply buffering the entire clip before playback (page 52, lines 5-9). It would have been obvious to one of ordinary skill in the art to combine Gross' video system which maintains these variables with the buffer resizing method disclosed in Schuster to allow the user to experience high quality video over low quality connections.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 7-11, 13, 14, 16- 20, 22-26, 28, 29, 31-35, 37-41, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gross (2000) in view of Schuster (US 6,175,871).

As regards Claims 1, 16, and 31, Gross et al. disclose a network interface configured to receive a network signal from a communication network wherein the network signal includes video (pg. 3, line 8); a memory configured to store video from the network signal (pg. 3, line 7); a video interface (pg. 3, line 10) configured to transfer a video signal to a video display wherein the video signal includes the memory (pg. 44, lines 10-12).

Gross et Al. do not disclose that the processing system is configured to determine a first time period based on the video display rate times the first amount, to determine a second time period based on the network transfer rate times the second amount, and to initiate the transfer of the video signal when the first time period (i.e. the first variable) is equal to the second time period (i.e. the second variable) (col. 2, lines 57-59). Schuster does disclose that the processing system is configured to determine a first time period based on the video display rate times the first amount, to determine a second time period based on the network transfer rate times the second amount (col.3, lines 11-15) (Please see the last paragraph of the response to arguments section for an explanation of Claims 1, 16, and 31).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to add the buffer determination system of Schuster, an analogous art, with the multimedia system of Gross because having only the necessary amount of the video

buffered in the memory before playing is more convenient than having the entire video clip buffered, which is the default in Real Player.

As regards Claims 2, 17, and 32, Gross et al. further disclose that the processing system is configured to determine the network transfer rate based on an initial amount of the video received in the network signal and a time period to receive the initial amount of the video (pg. 37, lines 22-23). It is inherent in the 'Perfect Play' setting that before determining which quality of video the user receives, the computer must first determine the network transfer rate. 'Perfect Play' allows the user to experience the highest quality stream. If the connection cannot support a certain quality of bit stream that it is receiving, it seeks a lower the bit stream. Perfect Play does this by determining the network transfer rate based on the video that it has already received.

As regards Claims 3, 18, and 33, Schuster discloses that the processing system is configured to initiate the transfer of the video signal when the first time period (i.e. the first variable) is equal to the second time period (i.e. the second variable) (col. 2, lines 57-59).

As regards Claims 4, 19, and 34, Gross et al. disclose that the processing system is configured to initiate the transfer of the video when the first time period (i.e. the first variable) is greater than the second time period (i.e. the second variable) (col. 2, lines 57-59).

As regards Claims 5, 20, and 35, Gross et al. disclose that the first amount of the video in the memory includes a previously received and displayed portion of the video (that is, the video represented to the left of Position Slider) (pg. 19, Navigation Table).

As regards Claims 7, 22, and 37, Gross et al. disclose that the processing system is configured (by raising the amount of video buffered) to initiate the transfer of the video signal when the video can be continuously viewed to completion without intermission and before all of the video is received in the network signal (pg. 65, lines 11-13).

As regards Claims 8, 23, and 38, Gross et al. disclose that the processing system is configured (by raising the amount of video buffered) to initiate the transfer of the video signal when the video can be viewed to completion with one intermission and before all of the video is received in the network signal (pg. 65, lines 11-13).

As regards Claims 9, 24, and 39, Gross et al. disclose that the processing system is configured to initiate the transfer of the video signal when a user-selected portion of the video can be viewed to completion without intermission and before all of the video is received in the network signal (pg. 65, lines 11-13).

As regards Claims 10, 25, and 40, Gross et al. disclose that the processing system is configured to transfer a menu signal to the video display to display a user selection menu (pg. 9, figure 3.1).

As regards Claims 11, 26, and 41, Gross et al. disclose that the user selection menu indicates a plurality of available videos for viewing on-demand (such as channels) and the user selection selects the video from the available videos (pg. 9, figure 3.1).

As regards Claims 13, 28, and 43, Gross et al. disclose that the user selection menu (such as in the status bar) indicates a time remaining before the transfer of the video signal will initiate (pg. 9, figure 3.1).

As regards Claims 14, 29, and 44, Gross et al. disclose that the user selection menu provides a notice when the transfer of the video signal is initiating (pg. 9, figure 3.1).

Claims 12, 15, 27, 30, 42, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gross (2000) in view of Schuster (US 6,175,871) and in further view of Shah-Nazaroff (US 6,157,377).

As regards Claims 12, 27, and 42, Gross and Schuster jointly disclose the video system, method, and soft program of Claims 11, 26, and 41 but do not disclose that the user selection menu indicates a plurality of available display rates and the user selection selects the video display rate from the available video display rates. Shah-Nazaroff does disclose that the user selection menu indicates a plurality of available display rates and the user selection selects the video display rate from the available video display rates (figure 5).

Gross, Schuster, and Shah-Nazaroff all come from the same field of endeavor, namely the field of multimedia transmission.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to add the available display rates of Shah-Nazaroff to the multimedia system of Schuster and Gross because users may enjoy more downloading lower quality video if it takes less time.

As regards Claims 15, 30, and 45, Shah-Nazaroff discloses that the video signal is configured as a channel for a satellite system video decoder (figure 5).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to David R. O'Steen whose telephone number is 571-272-7931. The examiner can normally be reached on 8:30 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on 571-272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DRO



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